

REMARKS

Claims 1-18 and 21 are currently pending in the application. Claims 1-20 were subject to a restriction requirement, wherein claims 1-18 are alleged to be drawn to species I, claim 19 is alleged to be drawn to species II, and claim 20 is alleged to be drawn to species III. During a telephone conversation with the Examiner on January 16, 2007, provisional election of the claims of species I was made by Thomas G.

Eschweiler. ***Applicant hereby affirms the election species I, namely, claims 1-18, without traverse*** and claims 19-20 are cancelled without prejudice or disclaimer.

Applicant further notes with appreciation the provisional allowance of claims 6-7 and 13. Claims 6 and 13 are amended into independent form with this response, and claims 6-7 and 13 are now believed to be in condition for allowance. Claims 12 and 17 and paragraph 19 of the specification are amended to overcome objections, and claim 21 is added with this response, wherein no new matter has been added. Claims 1-2 and 15 have been amended to correct clerical errors, and should not be considered as narrowing amendments related to patentability. Reconsideration of the application in light of the following remarks is respectfully requested.

I. OBJECTION TO THE SPECIFICATION AND CLAIMS 12 AND 17

Claim 17 was objected to for an antecedent problem, and has been amended with this response in accordance with the suggestion made in the Office Action.

A replacement paragraph for paragraph 19 of the specification has been provided to spell out the acronym "SMD" as a "surface mount device". In particular, paragraph 19 of the specification has been amended to recite that the submount can be mounted on the main circuit board as a surface mount device (SMD). Applicant asserts that the amendment does not add new matter, as one of ordinary skill in the art would understand the original reference to "SMD mounting" as being the mounting of a surface mount device.

Claim 12 has also been amended to remove reference to SMD mounting, and claim 21 has been added as being dependent upon claim 12, reciting the submount

being mounted on the main circuit board as a surface mount device. Accordingly, the specification and claims 12 and 17 are believed to be in condition for allowance, and withdrawal of the objection is respectfully requested.

II. REJECTION OF CLAIM 12 UNDER 35 U.S.C. §112, SECOND PARAGRAPH

Claim 12 was rejected 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim subject matter which Applicant regards as the invention. As stated above, a replacement paragraph for paragraph 19 of the specification has been provided to spell out the acronym “SMD” as a “surface mount device”. Claim 12 has been amended to remove reference to SMD mounting, and claim 21 has been added to depend on claim 12, reciting the submount being mounted on the main circuit board as a surface mount device. Accordingly, claim 12 is now believed to be in condition for allowance, and withdrawal of the rejection is respectfully requested.

III. REJECTION OF CLAIMS 1-5, 8-12, AND 14-18 UNDER 35 U.S.C. §103(a) OVER ALTHAUS ET AL.

Claims 1-5, 8-12, and 14-18 were rejected 35 U.S.C. §103(a), as being unpatentable over Althaus et al. (U.S. Patent No. 6,422,766). Claims 12 and 17 have been amended and claim 21 has been added, as discussed above. Claims 1, 2, and 15 have also been amended to correct clerical errors,. Namely, claim 1 has been amended to remove an “/or” regarding the “holding and coupling part”, wherein “/or” was an inadvertent clerical error. Claim 2 inadvertently used the term “unit” instead of “part”, and claim 15 has been amended to correct another clerical error wherein “an” is presently replaced with “and”. Thus, the amendments of claims 1, 2, and 15 should not be construed as narrowing amendments related to patentability.

Applicant respectfully requests withdrawal of the rejection of claims 1-5, 8-12, and 14-18, and consideration of claim 21 for at least the following reasons.

- i. **The electrical drive and/or receiving circuit, as claimed in claim 1, is an electrical circuit capable of performing as an electrical drive circuit and/or an electrical receiving circuit. Althaus et al. fail to teach or suggest such an electrical drive and/or receiving circuit.***

Claim 1 of the present invention recites, “an electrical drive and/or receiving circuit coupled to the transmitting and/or receiving element” (emphasis added). As is clear from the specification and the claims, the electrical drive and/or receiving circuit is capable of performing functions as an electrical drive circuit and/or as an electrical receiving circuit. Althaus et al. fail to teach or suggest such an **electrical** drive/receiving circuit. On page 6, line 8 of the Office Action dated January 29, 2007, reference number 17 of Althaus et al. is referred to as an electrical drive and/or receiving element. However, reference number 17 of Althaus et al., is clearly described as a monitor chip for receiving radiation produced by the laser chip, wherein the monitor chip may be used for measuring or regulating the laser power (see, e.g., Althaus et al., col. 7, Ins. 34-38). Clearly, such a radiation receiver is not the electrical drive and/or receiving circuit recited in claim 1, and no motivation is provided for one of ordinary skill in the art to change a chip for monitoring radiation to an electrical drive and/or receiving circuit as claimed. Accordingly, reconsideration of claim 1 and all rejected dependent claims is respectfully requested.

- ii. **The mount and configuration thereof, as recited in claim 1, is neither taught nor suggested by Althaus et al.***

In claim 1, the present invention recites **a mount for supporting the transmitting and/or receiving element**, wherein the electrical drive and/or receiving circuit is **arranged outside the holding and coupling part on a submount**, and **wherein the mount is arranged at right angles to the submount**. On page 6, line 3 of the Office Action, reference is initially made to Fig. 1 of Althaus et al., wherein the Office Action appears to cite the claimed mount as the Peltier cooling element 11 for the laser module 2. In Fig. 3a, the cited mount would appear to be the carrier plate 27.

However, on page 6, line 17 of the Office Action, as best understood by Applicant, an arrangement of the items 21 and 19 of Althaus et al. are cited as the mount and submount arrangement of claim 1, wherein the end face 21 is said to be at right angles to the baseplate 19. In this interpretation, however, Applicant notes that the mount appears to be cited as a completely different item than on page 6, line 3 of the Office Action, namely, one of the baseplate 19 or the end face 21 of the housing cover 20 of Fig. 3, as opposed to the cooling element 11 of Fig. 1 or the carrier plate 27 of Fig. 3. Regardless, it is clear that the end face 21 of the housing cover 20 cannot be considered either of the claimed mount or the submount of the present invention, as the end face 21 of the housing cover 20 **clearly does not support an electrical drive and/or receiving circuit, as claimed in the present invention.** Further, not only is an electrical drive and/or receiving circuit neither taught nor suggested, as discussed previously, but the end face is furthermore not arranged as a submount, as claimed in the present invention, **wherein the electrical drive and/or receiving circuit is arranged on the submount outside a holding and coupling part.** Accordingly, reconsideration of claim 1 and withdrawal of the rejection of claims 1 and dependent claims 2-5, 8-12, and 14-18 is respectfully requested.

iii. Althaus et al. fail to teach or suggest the holding and coupling part forming a cylindrical cutout, one of whose ends contains the transmitting and/or receiving element, as recited in claim 2.

Claim 2 of the present invention recites **a cylindrical cutout, one of whose ends contains the transmitting and/or receiving element and whose other end forms the coupling area for an optical waveguide.** The Office Action only refers to Fig. 1 of Althaus et al. in regards to the rejection of claim 2. As understood by Applicant, however, if one were to consider the outer housing 1 of Fig. 1 to form the holding and coupling part and the wall 21 (illustrated in Fig. 3) to represent a coupling area for receiving and optical waveguide, such an arrangement would obviously be a very different structure than that of claim 2. Namely, the structure of claim 2 having a

cylindrical cutout whose one end contains the transmitting and/or receiving element and whose other end forms the coupling area for an optical waveguide. Again, withdrawal of the rejection is respectfully requested.

IV. REJECTION OF CLAIMS 1-5, 8-12, AND 14-18 UNDER 35 U.S.C. §103(a) OVER ISONO ET AL.

Claims 1-5, 8-12, and 14-18 were also rejected 35 U.S.C. §103(a), as being unpatentable over Isono et al. (U.S. Patent No. 7,050,678). As discussed above, claims 1, 2, 12, 15, and 17 have been amended and claim 21 has been added, as discussed above. Applicant respectfully disagrees with the rejection, and withdrawal of the rejection is respectfully requested for at least the following reasons.

i. The electrical drive and/or receiving circuit, is neither taught nor suggested by Isono et al.

As stated above, claim 1 of the present invention recites a particular arrangement in which an electrical drive and/or receiving circuit is coupled to the transmitting and/or receiving element. In particular, a mount is provided for supporting the transmitting and/or receiving element, wherein the electrical drive and/or receiving circuit is arranged outside a holding and coupling part on a submount, and wherein the mount is arranged at right angles to the submount. Isono et al. fail to teach or suggest such a structure, and further fail to teach or suggest the electrical drive and/or receiving circuit at all, and no motivation is provided in the reference to provide such a structure. On page 9, lines 4-6 of the Office Action, reference is made to “paragraph 61 of the detailed disclosure” in regards to an alleged teaching of the electrical drive and/or receiving circuit of the present invention, as well as its arrangement. Applicant respectfully disagrees that such a teaching exists.

Applicant asserts that no teaching or suggestion of the electrical drive and/or receiving circuit is taught or suggested in the cited reference, particularly in the arrangement presently claimed, and no motivation is provided for one of ordinary skill in

the art to modify the reference to arrive at the claimed invention. For example, there appears to be no teaching or suggestion of the electrical drive and/or receiving circuit or the arrangement thereof outside a holding and coupling part **on a submount**, nor is there a teaching or suggestion that the mount, as claimed, is **arranged at right angles to the submount carrying the electrical drive and/or receiving circuit**.

Accordingly, claim 1 is neither taught nor suggested in Isono et al., and no motivation is provided for one of ordinary skill in the art to modify the reference to arrive at the claimed invention. Thus, claim 1 and independent claims 2-5, 8-12, and 14-18 are believed to be allowable over the cited art, and withdrawal of the rejection is respectfully requested.

ii. Claim 4 recites the mount being a leadframe, and Isono et al. clearly teach away from the package 12 being a leadframe.

Claim 4 of the present invention recites the mount being a leadframe, wherein an electrical link is provided for the transmitting and/or receiving element, and is electrically connected to the submount.

In reference to claim 4 of the present invention, and the citation of items 12 and 12a of Isono et al. as the mount being a leadframe, Applicant notes that item 12 is the package, and item 12a is a concavity for the ferrule 5 (*see, e.g.*, Isono et al., col. 7, lns. 34-36). It is clear, however, as illustrated in Fig. 3 of Isono et al., that the package 12 is non-conductive, as lead terminals 7 pass through the package 12. Accordingly, the package 12 cannot be a leadframe, as suggested in the Office Action, and Isono et al. clearly teach away from the package being a leadframe, as illustrated at least in Fig. 3.

Accordingly, withdrawal of the rejection of claim 4 is requested for this additional reason.

V. CONCLUSION

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, MAIKP174WOUS.

Respectfully submitted,
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